

Analysis of Selected Demographic and Practice Characteristics of Nurse Practitioners and Physician Assistants in New York

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ABSTRACT

Purpose of study: The purpose of this research is to understand the demographic and practice differences between nurse practitioners (NPs) and physician assistants (PAs).

Background: NPs and PAs play important roles in medical practice, and demand for them has been increasing for many years. Although they are both healthcare professionals holding advanced degrees and have very similar responsibilities in many facilities, there are many potential differences between them. For example, NPs generally work under supervision of physicians but can practice independently, while PAs must work with physician oversight.

Methods: This study used data from the New York State Education Department (NYSED) Re-licensure Survey for the NP analysis and data from the National Commission on Certification of Physician Assistants (NCCPA) for the PA analysis. NYSED requires that NPs complete a mandatory survey at the time of re-licensure. The survey included questions on demographic, educational, and practice characteristics. NCCPA is the certifying organization for PAs in the United States, and they collect data from PAs when they certify or recertify.

NPs and PAs were compared based on their age, race, weekly hours worked in patient care, and current practice settings across New York State Population Health Improvement Program (PHIP) regions and within rural and urban counties. Rural and urban counties were identified using Ebert's Typology.

Results and Findings: NPs are older than PAs, with more than 52% of NPs age 50 or older compared to only 20% of PAs. Both NPs and PAs are older in rural areas than in urban areas.

NPs and PAs are not as diverse as the New York's population. NPs and PAs are more diverse in urban areas than in rural areas. Specifically, 5% of NPs and 6% of PAs are Hispanic/Latino compared to nearly 19% in the general population, and 11% of NPs and 6% of PAs are Black/African compared to more than 14% in the general population.

On average, NPs work more hours than PAs in patient care, with NPs working 48 hours per week compared to 40 hours per week for PAs. The percentage of time in patient care relative to total time worked per week is similar for PAs and NPs.

A higher percentage (nearly 67%) of NPs work in ambulatory care settings (including health centers, free-standing clinics, hospital outpatient clinics, physician offices, and independent NP practices), while a higher percentage (nearly 55%) of PAs work in hospitals (including inpatient, outpatient, and emergency departments).

Conclusions and Implications: This research study describes basic differences in demographic and practice characteristics of active NPs and PAs in New York. However, this analysis did not assess the contributions of NPs and PAs to increasing access to care for the state's underserved populations. Future research should examine NP and PA patterns of service delivery to gain a better understanding of their roles and responsibilities that contribute to improving population health in New York.

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INTRODUCTION

Purpose: To understand the demographic and practice differences between nurse practitioners (NPs) and physician assistants (PAs).

Background: Demand for NPs and PAs has been increasing for many years. Although they are both healthcare professionals holding advanced degrees and have very similar responsibilities in many facilities, there are many potential differences between them. For example, NPs generally work under supervision of physicians but can practice independently, while PAs must work with physician oversight.

METHODS

- Used data from National Commission on Certification of Physician Assistants (NCCPA) for the PA analysis
 - NCCPA is the certifying organization for PAs in the US; they collect data from PAs when they certify or recertify
- Used data from New York State Education Department (NYSED) Re-licensure Survey for the NP analysis
 - NYSED requires that NPs complete a mandatory survey at the time of re-licensure
 - Survey includes questions on demographic, educational, and practice characteristics
- NPs and PAs were compared based on their age, race, weekly hours worked in patient care, and current practice settings across New York State Population Health Improvement Program (PHIP) regions and within rural and urban counties. Rural and urban counties were identified using Ebert's Typology.

RESULTS

Approximately 19,000 nurse practitioners (NPs) and physician assistants (PAs) are actively practicing in New York State.

Table 1. Estimated Counts of Active NPs and PAs, Statewide and by Rural and Urban Practice Locations

		Number	Rate per 100,000 Total Population*
NPs	Rural	1,406	45.3
	Urban	10,314	62.1
	Statewide	11,720	59.5
PAs	Rural	1,085	35.0
	Urban	7,237	43.6
	Statewide	8,322	42.2

* American Community Survey, 2012 – 2016 5-Year Estimates

RESULTS (cont.)

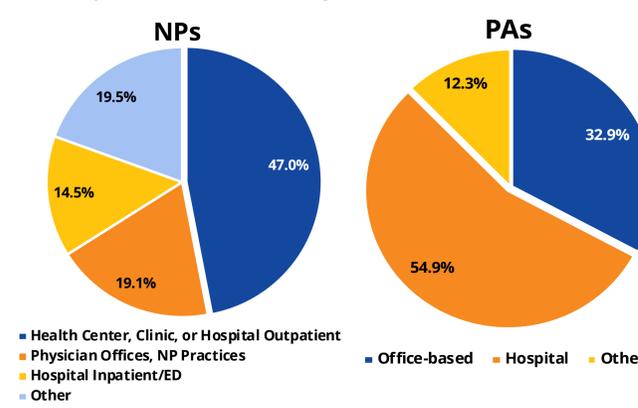
NPs are much older, on average, than PAs, with more than half of NPs 50 years of age or older, compared to slightly less than 20% of PAs.

Table 2. Estimated Counts of Active NPs and PAs, Statewide and by Rural and Urban Practice Locations

Age Group	20-24	25-29	30-39	40-49	50-59	60-69	70+	Mean Age
NPs	0.0%	1.1%	22.5%	24.5%	28.3%	21.0%	2.7%	49.7
PAs	3.4%	20.0%	36.1%	20.6%	13.5%	6.1%	0.3%	39.0

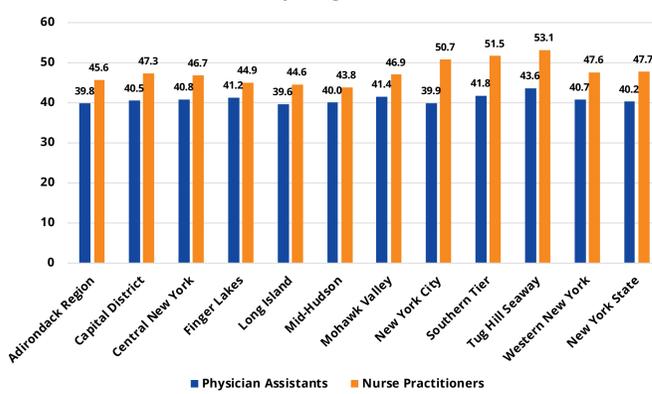
A higher percentage of NPs work in ambulatory care, while a higher percentage of PAs work in hospitals (inpatient, outpatient, and emergency department).

Figure 1. Distribution of Active NPs and PAs in New York State by Health Care Setting



On average, NPs work longer hours than PAs statewide and in all regions.

Figure 2. Active NPs and PAs in New York State by Hours Worked Per Week and by Region



RESULTS (cont.)

NPs and PAs are less diverse than the state's population, with a much smaller proportion of Hispanic/Latino NPs and PAs compared to their presence in the general population of the state.

Table 3. Race/Ethnicity of Active NPs and PAs, Statewide and by Rural and Urban Practice Locations

		Non-Hispanic						Hispanic/Latino
		White	Black/African American	Asian/Pacific Islander	American Indian/Alaskan Native	Multiple Races	Other	
NPs	Rural	92.8%	2.1%	1.6%	0.6%	0.7%	1.2%	1.1%
	Urban	66.8%	12.3%	10.5%	0.0%	1.7%	3.2%	5.5%
	Statewide	69.9%	11.1%	9.5%	0.1%	1.6%	2.9%	5.0%
PAs	Rural	93.8%	1.2%	1.1%	0.2%	0.7%	0.7%	2.4%
	Urban	71.7%	7.2%	9.7%	0.1%	1.5%	2.5%	7.0%
	Statewide	74.6%	6.4%	8.5%	0.1%	1.4%	2.3%	6.4%
New York Population*		56.4%	14.4%	8.0%	0.2%	1.8%	0.5%	18.6%

* American Community Survey, 2012 – 2016 5-Year Estimates

DISCUSSION

There are a number of limitations associated with this analysis:

- Available NP data was limited to those NPs who re-registered between September 2015 and December 2017, or approximately 70% of all licensed NPs in New York State.
- The re-registration survey is not completed by newly licensed NPs, which may skew results on demographics. Consequently, results from this analysis may not be applicable to all of the state's NPs.
- Variables from the 2 data sources were not always consistent, particularly in regards to setting. It was not possible to break out the hospital setting categories for PAs by inpatient, outpatient, and emergency room. This made it difficult to determine the proportion of PAs working in ambulatory care settings within hospitals.

CONCLUSIONS

This study describes basic differences in demographics and practice characteristics of active NPs and PAs in New York. However, this analysis did not assess the contributions of NPs and PAs to increasing access to care for the state's underserved populations. Future research should examine NP and PA patterns of service delivery to gain a better understanding of their responsibilities and roles that contribute to population health in New York.